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REPORT ON MALPRACTICE.1

BY EUGENE F. SANGER, A. M., M. D., OF BANGOR.

"In a multitude of counselors there is safety" does not apply to our profession, because the medical counselor is liable to be included with the attending physician in malpractice suits. If the attending physician is poor and the counselor rich, the latter may have to contend single-handed, as law is very discriminating in its victims.

Dr. J. A. Richards, of Farmington, was sued, with \$10,000 damages alleged, for partial dislocation of the ankle, fracture and contusion of the leg, which he saw but once in consultation. Advised placing it upon a splint and waiting until the swelling was reduced. Acquitted; patient poor. Dr. Anderson, of Gray, was sued for \$10,000 for two consultation visits with Dr. Stevens in a case of oblique fracture of the leg. Case non-suited. Proved that the bandages were removed by plaintiff. Cost Dr. Anderson \$500 to defend. Attending physicians in both cases poor, although Drs. Anderson and Stevens were both sued. Dr. S. Whitmore, of Gardiner, was sued because a patient of his died from the profuse hæmorrhage of a severed artery of the foot.

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We are prosecuted for unavoidable accidents happening in an attempt to obviate the effects of congenital deformities. Dr. J. B. Pollard, of Orrington, was subjected to a reference suit for a vesico-vaginal fistula, occurring in a woman with deformed pelvis, delivered of a child with instruments. Instruments were used at the three previous births. Dr. Thomas Brown, of Paris, was sued for \$6000 in a case of vesico-vaginal fistula from malposition, protracted loss of water, prolonged pressure, and instrumental delivery. Settled it for \$300 and costs.

It cost Dr. N. P. Monroe, of Belfast, \$1000 to defend a case of purulent ophthalmia, with loss of sight, from getting lime into the eyes. Dr. Patten, of Monson, was sued for the treatment of a case of erysipelas. Could as well hold the mariner responsible for the disasters of the winds and waves. Dr. J. M. Jonah, of Eastport, was sued

for dislocation of the hip, with fracture of the acetabulum and laceration, which he reduced. The bandages were removed, and he was not permitted to see it again. \$5000 claimed. Settled it for \$100 and costs. Patient poor. The most famous and yet the most provoking illustratration of the injustice of malpractice suits is the case of Lowell v. Drs. Hawks and Faxton for dislocation of the hip; damages claimed, \$10,000; three trials, first verdict \$1900, second \$100, third disagreement as to Hawks. Faxton acquitted; entered neither party. Cost Lowell \$2000; he became bankrupt. It cost Dr. Hawks between \$2000 and \$3000 and years of hard labor to pay the costs of the suit. The two leading and opposing expert witnesses were Dr. J. C. Warren, professor of anatomy and surgery, Harvard Medical College, of whom Gross writes in connection with Physick, Mott, and Dudley, "America will not produce the like again;" and Dr. Nathan Smith, professor of anatomy and surgery, Yale, Dartmouth, and Bowdoin medical colleges, - "one of the most extraordinary medical men whom the country has ever produced." Drs. Hawks and Faxton claimed the reduction of a dislocation forward and downward into foramen ovale; limbs brought together and no lengthening. Fifteen days afterwards discovered some lengthening, and were in doubt as to reduction. Dr. Warren three months afterwards claimed a dislocation downwards and backwards into the lesser ischiatic notch, with three inches of lengthening. Failed to reduce; never knew one to be reduced after three months. Dr. Smith claimed "fracture of pelvis, length owing to preternatural relaxation and contraction of the muscles of the hip;" delay of eight weeks might be a benefit in reduction. Sir Astley Cooper's negative report on downward and backward dislocations was used on both sides. Hippocrates, Celsus, Petit, Boyer, Rees, Richeraud, etc., were cited on one side or the other. Some years later a post mortem proved all wrong. Dr. J. Mason Warren, in his Surgical Observations, describes it as follows: "The head of the bone lies almost immediately under the old acetabulum, perhaps a little forward of it." Where only ordinary skill is required by law in the treatment of injuries the lawyer should be held to some accountability in actions for causes which can't be determined except by a post mortem of his client. Dr. E. K. Prescott was sued for fracture of the tibia into the kneejoint. Verdict, \$400 and costs. Saw case but once, and thought it was not fractured. Could hardly expect a perfect result in such a case. Dr. Thos. Frye, of Rockland, was twice sued for fracture of the thigh, and twice threatened for fracture of the leg. Three of the patients were poor. He prevailed every time, but it cost him \$4000. It injured his practice and broke down his health. Damages as high as \$20,000 were claimed.

The most absurd suits are for warranty, because the very nature

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of our business precludes any such idea; and it is acusing us of idiocy or rascality to charge us with any such agreement. Dr. N. A. Hersom, of Portland, was sued for fracture of the leg, involving the ankle, followed by rheumatic arthritis. Damages laid at \$5000. The doctor prevailed, and a new trial was denied. He was sued again for warranting a cure. Although this plaintiff was one of the nine who were able to pay taxable costs, it cost the doctor \$800 to prove the impossibility of a perfect result in such cases, and the absurdity of a suit for the warranty of an impossible thing.

My reports of the threatened cases are very imperfect, but I have been able to classify twenty-seven cases, as follows: Fracture of the thigh, oblique one; fracture of the leg, six; fracture of the ankle, one; compound fracture of the leg and ankle, one; fracture of the arm, two; fracture of the fore-arm, two; fracture of the elbow, three; fracture of the wrist, one; dislocation of the elbow, reduced, one; dislocation of the elbow and wrist and fracture of the ulna, one, result good; Hays' amputation of a gangrenous foot, one; amputation of two fingers, slight necrosis following, one; explosion of powder, causing the loss of both eyes, one; injured leg, one; still-born child, one; craniotomy, one; medicine, producing miscarriage, one; causing hysteria, one; injury to health, one; sickness of daughter, one. Not one was able to pay the taxable costs of a lawsuit. Four of these surgeons were frightened into paying, because the costs of defense would be burdensome and the notoriety unenviable. One surgeon paid \$100 in case of shortening of a fractured leg between one fourth and one half inches, which was less than the average; another surgeon paid \$50 in a similar case; one paid \$100 for a fractured arm, and another paid \$250 for a fractured fore-Not one dared to enforce his bill for services. If we are to pay for all still-born children, the next class of suits will be warranty in conception.

There is neither safety nor money in the practice of medicine, under the existing law. Either we must give up surgery entirely, or select, among reliable patients, cases which promise favorable results. The poor are a prolific source of malpractice suits, and so long as attorneys go unpunished for their black-mail attacks upon us we must leave the afflicted poor, as barbaric tribes do, to perish by the wayside, or for the towns and cities to take care of.

I took pains after my trials to classify and analyze the risks and profits of eighteen surgical cases taken from my books chronologically, selecting six each of cancer, amputation, and fracture: namely, the removal of six cancerous breasts; the amputation of three thighs, two legs, and one arm near the shoulder; and the setting of one compound comminuted fracture of the arm near the shoulder, one leg, one clavicle, one elbow, one arm, and one wrist. All made good recoveries,

excepting one amputation, to which I was called when the patient was in articulo mortis. I made 237 visits, traveled 764 miles, and received \$288.50 compensation. I averaged \$1.00 per visit including 31 miles travel. Valuing my professional services at \$30 per month, as I drove my own horse, I realized for the use of my horse and equipage \$2.00 per day for three months, the actual time consumed in this surgery, a portion being in the night in drenching rains, over sloughy roads, and

through drifting snow-storms.

Under our laws I am liable to prosecution for malpractice in all these cases, as the unsightly scars of unrestored breasts and limbs and the imperfections of bony unions excite doubts of surgical skill and care. Based upon my experience I incurred the risk of suits for \$153,000, the loss of nine years' time, and the payment of \$18,000 in lawyers' fees and court costs, for which the prestige of surgery does not compensate. More than three fourths of these patients were poor, and would have gone to charitable institutions at a distance if I had not done the work cheap and taken what was voluntarily paid. metropolitan cities get the surgery of the rich.

A law should be enacted which will protect us in the legitimate practice of our profession, and secure skillful treatment to our patients. The present law enables the poor patient to throw the entire responsibility upon the surgeon, and encourages negligence and disregard of instructions, in hopes that some slight deviation from perfect results will establish a claim against the surgeon for damages, the conviction prevailing, perhaps most markedly in fractures and dislocations, that the careful and skillful surgeon possesses the power to correct all de-

formities and cure all diseases.

The burden of proof virtually rests upon the surgeon. The laws of disease are ignored, and imperfect results are prima facie evidence of guilt. Constitutional infirmities and congenital deformities are no exception. Divine law, which says we are born heirs to disease, and nature's laws, which cannot perfectly restore solution of continuity and loss of substance, are forgotten. No mortal power can resist the contraction of a scar, any more than it can control the rending and lifting power of frost. Imperfect stumps, shortened limbs, deformed hands and feet, contracted tendons and rigid cicatrices, are in accordance with pathological laws, and as unalterable as astronomical, chemical, and mathematical laws.

It costs the poor man comparatively nothing, under existing laws, to prove a claim which has public sympathy and prejudice in its favor, and which the surgeon has to combat by an expensive elucidation of the general principles of the medical science, as we would the problems of Euclid.

In my club-foot trial, the jury were shown a boy born with de-

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formed feet, which did not exhibit the marks of any surgical operation, but did indicate six years of parental neglect, and yet I had to send four hundred miles for my assistant, Dr. Jewell, to testify to a skillful operation, to Boston to prove the universal use of Scarpa's shoe in such cases, and for experts in and out of the State to demonstrate that I did not injure what did not show the marks of injury, that treatment often failed, and that it frequently required years of treatment by the parents, under the direction of a surgeon, to succeed. Should the law give a poor lawyer or a poor patient the power to put me to more court cost than any surgeon in this city can net in two years' of practice, without providing redress or the pledge of a single dollar as a guaranty of good faith in parading me before the courts to prove a negative? Are not our patients, our profession, and our country the sufferers?

In my second trial, Bowley, minus a leg, and a dependent wife with an infant at the breast, were flaunting witnesses of a great calamity. I had opened an abscess, he had lost a leg. The loss of a leg was a great misfortune; ergo, bad surgery was the cause of this misfortune, which I must disprove by two long, expensive, and tedious trials.

This case demonstrates the injustice of our statutes, which compelled me to prove, by expert testimony, that the physiological law of the gaping of incised wounds disproved the perjured loss of flesh, that the diseased joint existed prior to the alleged loss of flesh, and that the loss of a piece of flesh, as described, would not have injured a well joint. The plaintiff would not have put me to the expense of proving a reductio ad absurdum if the law had held him accountable for costs.

Skill in medicine is just as sensitive as capital in trade, and is bound to disappear under extra-hazardous risks. Barber phlebotomy, incantations, and the red-hot searing iron will inevitably displace surgery, or it will be confined to the rich, who cannot afford to prosecute the surgeon. The present law presents the singular paradox that those who can afford to pay for skilled labor cannot afford to sue, and those who can afford to sue cannot afford to pay for skilled labor.

The only remedy is a law which will compel the plaintiff to pay taxable costs in case of defeat. If the poor plaintiff proves his case, he gets paid for the cost of his suit, for the damages which he received, and bankrupts the surgeon; he exchanges place with the surgeon. The plaintiff carries around a lame leg, with the surgeon's money to support it, and the surgeon carries around a lame reputation, with nothing to support it. Such a law will teach the patient caution in selecting a surgeon, care in following directions, and hesitation in starting frivolous suits.

As it is now, the unfortunate patient tries to retrieve his bad luck

by levying upon the hard-working surgeon, without risking or staking anything for the chance of testing what may prove to be no case at all. He sues upon the principle of flipping the pennies, heads I win, tails you lose. The suit depletes the surgeon's pocket and ruins his reputation. To pay is ruinous, to defend is ruinous, and to live in constant dread is ruinous. It blunts the moral senses, distracts the mind, destroys the courage, and kills out laudable ambition by lessening the value of reputation and the security of property, besides keeping the surgeon in constant jeopardy of being robbed by every unprincipled patient or attorney who covets his fame or property. We

should be put on an equal footing, at least, with our patients.

The objection raised to a malpractice law is that it is special or class legislation. Surgery is indispensable to the welfare and existence of the human race, and by saving life and utilizing labor it is a productive industry which needs the protection of a general law. It is a hazardous industry which cannot flourish without protection, and though by legislating for the general good it may secondarily benefit the surgeon, it is no more special or class in its privileges than the power accorded by law to lawyers to sue, arrest, and attach upon imaginary claims, and shift the accountability on to their worthless clients, or conspire with them for the ruin of our professional reputations with impunity, under the protection of "privileged communication." Better for the people to close up the court-houses than tolerate such abuses.

Towns are protected by special laws against the dangerous claims for damages on the highways. Previous notice of the defect and limited time to make complaint are required. No kind of a notice protects us, and the patient has six years after the accident and four after the death of the surgeon to prosecute for damages. Formerly, sheep were protected by a bounty on wolves and bears, until the latter were exterminated, and now the State proposes to exterminate the surgeons

by a similar process.

We have game laws, fish laws, railroad laws, ice laws, nuisance laws, manufacturing laws, and insurance laws, and why not surgical laws? Is the porgie industry more valuable than the surgical, and protecting ice fields from kerosene more important than protecting surgery in its mission of mercy? Ohio, New York, Illinois, etc., have special laws regulating the practice of medicine. In New York, every physician must have a diploma from one of the accredited state institutions, and join the county medical society, or be prosecuted. A per cent. on the ad damnum is allowed in case of defeat. In Illinois, a physician cannot practice without a diploma. In Vermont, and I think in New Hampshire, itinerant physicians must be examined by a medical board. Michigan, Massachusetts, etc., have a general law requiring a bond for costs. Ohio gives special protection. In Maine, any one can

practice medicine and any one can sue the doctor without restrictions.

The lawyer has plenary power to arrest or bond the surgeon for appearance at court in his own defense and at his own expense, damage his reputation, wound his feelings and purse, for which the surgeon has no redress unless he takes it out of the lawyer's hide. If the plaintiff is a minor, the lawyer may sue in the name of the rich father whose pocket a judgment for costs cannot reach.

The demagogue claims that such a law would be a restriction upon the rights of the people. We have already shown that malpractice suits are without profit to the patient and oppressive to the surgeon, and that the right is merely nominal, because it does not pay. The vigorous enforcement of such a right would cut off the occasion for it and virtually abolish it, because the surgeon would abandon practice among the poor if he were held to an unnatural and ruinous accountability. The refusal of pretended friends to sign the plaintiff's bond would show hypocrisy, insincerity, and want of confidence in a suit in which the bondsmen could risk nothing if the suit were well founded. The plaintiff should not be permitted to inflict costs upon the surgeon for defending a prosecution presumably wrong. His claim is not for a debt contracted by the surgeon, but for an infliction of the Almighty or of the patient's imprudence, for the relief of which he is largely dependent upon the powers of nature. The surgeon does not contract to furnish anything more than a helping hand.

The purpose of law is to prevent encroachment upon the individual rights of person and property, and assert the presumption of innocence. It is not to protect the poor plaintiff, in frivolous suits for fancied grievances, against the equally poor defendant, and compel the innocent defendant, rich or poor, to pay the expenses of a prosecution unjustly forced upon him. The present law virtually forces the doctor to pay for his own defense, or be defaulted. If his means are limited he cannot secure able defense, by which he becomes deprived of the presumption of innocence, as he will have to buy off cheaply what he cannot afford to defend, and sacrifice the right to practice his profession with safety. It is a wrong to the doctor, the patient, and the

community.

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The poor are induced to abandon legitimate industries for litigation, in which failure costs nothing and success draws a prize. The law offers a premium on rascality which levies black-mail on the physician, who prefers to pay rather than contend at unequal odds with perjury. Without accountability for false swearing, the ignorant poor have a decided advantage over the physician. In my Bowley case, the judge charged that either Dr. Weston and myself committed perjury, or Finnegan, through ignorance, might be mistaken. It cost me more than

\$1000 to prove that this mistake was a deliberate falsehood. Is it to be wondered at that surgeons pay to be let alone, or that our courts swarm with unprincipled attorneys who seduce the poor into the delusion of litigation for the purpose of robbery, demoralize the people, and burden our counties with debt? The surgeon becomes sour and disgusted, and, in the flush of manhood, abandons the practice, or does timidly what requires zeal and courage to do well. He sees a

poor-house or a jail constantly staring him in the face.

I have taken pains to collect and classify the opinions of the prominent medical men of this State upon the proper law, to guard the interests of the surgeon and the patient. I have received one hundred and fifteen reports: eighty-two are decidedly in favor of a bond for taxable costs; four, a bond for costs and remuneration to the surgeon for trouble, etc.; eleven had not matured an opinion; and sixteen were satisfied with the present law, guarded by the following qualifications, namely: one favored a better education of the masses in medicine; three, written exemptions from prosecution in doubtful cases; two, the jury one half or two thirds medical men; one, preliminary hearing; one, strict observance of medical ethics; three, higher standard of medical education, and a diploma, as an indispensable requisite; one, an expert law; one, abandon fractures and dislocations; one, common-sense jury; two, counsel and witnesses in all surgical cases: one, cover risks of prosecutions by adequate charges; and one, a dissection bill.

These reports show that seventy-five per cent. of the physicians of this State are in favor of a bond for taxable costs, thirteen per cent. advocate more protective measures still, while only nine per cent. are satisfied with the present law. With eighty-eight per cent. of the doctors opposed to the existing law, our law-makers may rest assured that it must be modified, or the poor will not get any surgical aid

whatever, and the rich a poor quality at a very high price.

The thirteen per cent. who advocate the present law with restrictions suggest requirements more impracticable than the bond for costs. For instance, a better education of the masses in medicine, aside from other objections, would incur the risk of "a little learning is a dangerous thing." A written exemption from prosecution in doubtful cases would be impracticable in cases of extreme peril and suffering. A jury composed of one half to two thirds medical men would infringe upon an accepted principle that every citizen is a peer. A closer observance of medical ethics is a parody upon the proverbial jealousy of our profession. The reports of suits and threats show that ignorant and jealous doctors are invariably mixed up with designing and unscrupulous lawyers in these malpractice suits, making it all the more necessary that some law should be enacted to protect the good and

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meritorious physicians and punish the wicked lawyers. A higher standard of education and a diploma are a burlesque upon the present statutes, which give budding genius the unrestricted right to practice medicine without any study. A common-sense jury is what the law presumes. Medical counsel in difficult cases is no protection whatever, as the counsel is as liable to be sued as the attendant, and more so if the richer. Higher charges to cover the risks is another way of refusing calls to the poor. The abandonment of fractures and dislocations is simply to give up surgery in the country. A dissection bill has failed.

An expert law would be an excellent thing. It would exclude from court the narrow-minded and ignorant men of our profession, and confine medical expert testimony to those whose pride and special qualifications would elevate them above small local jealousies and the prejudices of ignorance. The lawyer would be unable to use them, or turn their testimony to bad account, and the pay which they would be entitled to would secure good talent, capable of enlightening a jury. Under the present law, medical experts are permitted to testify upon subjects which, technically or practically, they never have had the chance or inclination to study, basing their qualifications upon an imperfect knowledge of a few general principles of an extensive science. In my club-foot suit, the most pronounced expert witness against me confessed that he had never operated on a club-foot, never fitted a a shoe, and was unacquainted with the leading authorities on orthopædic surgery.

We failed to get a bill through the last legislature to protect the science and art of surgery, mainly through the instrumentality of a low grade of lawyers, who kept out of sight their selfish and material interest in defeating it. My only reply is: Let these humane and philanthropic legislators contribute a moiety of their time and money to the suffering poor; let them run for the doctor at night, requite him for his thankless service, and, as an evidence of their sincerity and faith, become surety for the malpractice suits which they delight to encourage; let them work without retainers, relinquish their preferred claims on unsettled accounts and insolvent estates; let them step forward and cast their bread upon the waters, take the same risk that we do of prosecution for their mistakes, and the same chances of getting their pay, and their hypocritical cant will vanish into thin air. Even modify the law so as to compel pettifoggers to give bonds for taxable costs in all actions which they encourage, where the plaintiff cannot, or is unwilling to, and then, when they throw their drag-net, the people will be prepared to meet the mischief which these natural enemies of prosperity and professional excellence are capable of doing.

I am satisfied that the people are with us. They realize the im-

portance of the medical profession, and the value of skilled and intelligent labor; they realize that the community need no better guaranty against malpractice than the educational record and the unrequited services of the self-sacrificing and devoted family physician, whose interests run pari passu with the patient's, and whose greatest reward is a consciousness of having met the approbation of his patrons and doing his work well; they realize that all laws which put the physician at the mercy of the pettifogger and the ungrateful patient simply discourage the doctor in well doing, alienate him from his patrons, and deny them, in hours of distress and affliction, good and willing treatment, which law cannot furnish, and cannot force the doctor to furnish, where it is not for his interest to furnish it.

Dr. Sanger offered the following resolutions, which were adopted unanimously.

Resolved, that, with the existing state laws on civil malpractice, it is unsafe to practice surgery among the poor.

Resolved, that a committee of five be chosen by this association to present the subject to the next legislature, and ask for proper legislation.

Petitions are being extensively circulated throughout the State and cheerfully signed by our citizens in support of a bill protecting the science and art of surgery.

OVARIAN TUMORS.1

BY W. SYMINGTON BROWN, M. D., STONEHAM.

In our day no department of surgery has made such gigantic strides as gynæcology, and no branch of gynæcology has progressed so rapidly as that relating to ovarian tumors.

Ovariotomy, or, as some have called it, oöphorectomy, was first performed by Dr. Ephraim McDowell, of Kentucky, in 1809. He operated thirteen times, with eight recoveries. Dr. Henry J. Bigelow operated unsuccessfully in 1849. Dr. John L. Atlee, Sen., performed the first case of double ovariotomy in 1843, on a maiden lady, twenty-five years of age, who recovered, and was still living a few months ago. His brother, the late Dr. Washington L. Atlee, operated for the first time in 1844, unsuccessfully. Since then he has had over three hundred and sixty cases, a larger number than any other American surgeon, with about seventy per cent. of recoveries. Dr. Gilman Kimball, of Lowell, performed his first ovariotomy in 1855, and since then has operated over two hundred and thirty-six times. In 1847, Mr. H. E. Burd reported a case successfully performed during pregnancy. The patient aborted two days after the operation, but gave birth to a healthy

¹ Read before the Middlesex East District Medical Society, October 16, 1878.

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child seventeen months afterwards. Dr. Charles Clay, of Manchester, deserves the credit of giving the original impetus to ovariotomy in Great Britain. His first operation was performed in 1842, and was successful. Up to the end of 1871 he had operated two hundred and fifty times, with nearly 73 per cent. of recoveries. But to Mr. T. Spencer Wells, of London, and Dr. Thomas Keith, of Edinburgh, belong the honors of being the most celebrated and successful operators in our day. I have just returned from visits to these distinguished men, and shall try to convey to you as accurate an idea as I can of the impressions produced.

Mr. Wells was originally a surgeon in the British navy, and afterwards served in the Crimean war during 1855 and 1856. He commenced his remarkable career as an ovariotomist in February, 1858, and during the first three years operated on ten cases only. Since 1858 he has operated nine hundred and eleven times! Of his first five hundred cases three hundred and seventy-three recovered. Of his last series of one hundred cases eighty-three recovered. In that series he had twice a run of twenty-seven cases without a single death, and once a run of twenty-one successful cases. The following is a brief summarry of Mr. Wells's mode of operating:—

(1.) He uses a mixture of chloro-methyl vapor and atmospheric air (containing from two to four per cent. of the vapor) as an anæsthetic. It is administered by means of Dr. Junker's apparatus. The operation is performed on a table, to which the patient is fastened by a strap over the thighs. The abdomen is covered with a thin sheet of rubber cloth, long enough to allow of its being held up so as to protect the patient's face from the spray, and with an oval opening eight inches long by six inches wide in the middle. This opening is coated all round with adhesive plaster, so that it may adhere to the skin. (2.) He is exceedingly careful to secure clean quarters, clean air, clean instruments, and clean assistants. (3.) He uses the antiseptic spray (one of carbolic acid to twenty of water) during the whole operation. All the instruments, ligatures, and sponges are immersed in a similar solution. The operator and his assistants bathe their hands in another portion of the same solution. (4.) He endeavors, if practicable, to limit the length of the incision to six inches, and does not allow the fluid of the cyst to enter the peritoneal cavity. (5.) In all suitable cases, in securing the pedicle, he employs the clamp in preference to the ligature; in other words, he prefers the extra-peritoneal to the intra-peritoneal method. (6.) But if, on account of the pedicle being too short, thick, or broad, the intra-peritoneal method is adopted, he always uses a blunt needle to penetrate the pedicle, which is tied in two or more portions and cut off at some distance from the ligature. (7.) The greatest pains are taken to cleanse the abdominal cavity. Soft sponges are used for this purpose. A large

flat sponge is then slipped in over the bowels, and the wound sewed up. Ligatures of strong Chinese silk, about eighteen inches long, are threaded at each end with a medium-sized needle. Each needle is introduced from within outwards, including the peritonæum. When the whole number required have been inserted, the lips of the wound are separated to remove the flat sponge (which receives drops of blood from passing the needles) and to ascertain that no blood, serum, sponge, or forceps have been left in the abdominal cavity. The sponges and forceps (to arrest bleeding during the operation) are counted before and after the operation. (8.) He places a dry dressing of thymol cotton over the external wound; then long strips of adhesive plaster (going two thirds of the way round) are applied, and the whole abdomen is supported by a broad flannel bandage.

But no words can express his wonderful skill in diagnosis, his adroitness in operating, his coolness and self-poise in emergencies, and above all the confidence which his mere presence inspires in the patient.

Mr. Wells has performed ovariotomy a second time on the same patient in eleven cases, nine of whom recovered. He always examines the other ovary before closing the wound, but prefers to leave it unless seriously diseased. He has also operated in ten cases of ovarian tumor in which the patients were pregnant at the time, nine of whom recovered. One of the points especially deserving notice is the fact that Mr. Wells not only reports all his fatal cases, but faithfully prints even his mistakes and accidents (such as leaving at one time a sponge and another time a pair of forceps in the abdominal cavity). He takes especial pains to ascertain the subsequent history of all his patients, and records the details with a minuteness which has never before been attempted in any department of surgery. It has more than once been broadly hinted that he selects his cases with a view to favorable statistics; but nothing could be farther from the truth. He says: "I have operated lately, and shall soon be driven to again, in very unfavorable cases - cases almost hopeless — by the feeling that it is impossible to resist the prayer of a dying woman to try and save her life."

Dr. Thomas Keith, of Edinburgh, performed his first ovariotomy in 1863. Since then, up to last July, he has operated two hundred and seventy-three times. Up to the close of 1871 he had operated one hundred and thirty-six times, of whom one hundred and eleven recovered. "There were but three monocysts in the first one hundred cases." The late Dr. Peaslee truly says: "Since the reports of his cases show that they have by no means been usually of a promising character, but very often quite the reverse, to him must be awarded the highest order of skill, both as an operator and in the after-treatment of cases." This was written in 1872. Since then his success has been still greater, as the following facts show: of the last one hundred

cases ninety-three have recovered; during the last seventy cases only three deaths have occurred; and of the last thirty-six cases all have recovered.

I had not the pleasure of seeing Dr. Keith operate, because he had no patient during the short time that I was in Scotland, but he showed me his instruments, explained his method, and took me to his private hospital, where I saw the patient he had operated on two weeks before. Dr. Keith uses sulphuric ether exclusively as an anæsthetic, preferring it to chloroform, as safer and less likely to be followed by emesis. I asked him if he could tell me on what his great success depended. He replied, "Just cleanliness." But without doubting that the extraordinary pains taken to insure cleanliness tell markedly on the result, I am satisfied that even more depends on his personal magnetism — the absolute confidence which the patient reposes in his extraordinary skill and judgment.

Dr. Peaslee says of him: "When he had operated one hundred and thirty-six times, he had never made a mistake in diagnosis." He has now performed ovariotomy two hundred and seventy-three times without making a mistake in diagnosis. He often operates on the most desperate cases. He says: "Ten years ago (1864), when cases of ovariotomy were few, a young woman in the last stage of ovarian disease came to me a long journey from the north. She arrived completely worn out. It did not seem possible that in such a condition life could be prolonged many days, for the pulse was almost imperceptible, there was vomiting and diarrhoea, cedematous limbs, and albuminous urine, while a profuse feetid discharge was going on from an opening near the umbilicus. To remove a putrid cyst in such a condition of feebleness did not at that time even occur to me; yet since then I have operated more than once under circumstances not less unfavorable. Soon again (December, 1864) there came another case of very large tumor. The patient had been jolted for some hours in a coach, and in the hope of relieving the pain thus set up tapping was performed after her arri-The pain was not relieved, abdominal distention from flatus became excessive, and typhoid symptoms rapidly set in. Fearing a repetition of the slow-death process, ovariotomy was performed during the semi-delirium of septic fever. This was probably the first time that surgery broke in upon an acutely inflamed peritonæum. Recent lymph was present everywhere; adherent bowel and mesentery hedged in a thick-walled cyst, the base of which was in a complete state of slough. Inflammation had gone on to gangrene, and there was intense putridity. After an operation which went on for two hours the patient was placed in bed, - cold, vomiting, and nearly pulseless. It seemed as if we had simply killed her; yet she got rapidly into heat, the restless delirium at once disappeared, and there were warm perspirations, much sleep, and

a recovery without a drawback. Since then I have ten times met with cases of acute suppurating cyst. Of the ten acute cases operated on

eight recovered."

Dr. Keith uses the antiseptic spray in the same way as Mr. Wells. He is assisted by surgeons engaged in general practice, — often just from the general hospital, — and he insists only on thorough cleansing (washing the hands and using the nail brush in carbolic acid solution) before handling the patient. Every instrument used in an operation is first washed in the antiseptic fluid, then taken to pieces (for example, forceps) and polished as carefully as when it left the maker's hands.

I visited the hospital in which the majority of his operations have been performed. It is a private house in an airy part of the city, and it is a singular fact that his success has been even greater here than in the patients' own houses. Dr. Keith devotes a great deal of care and attention to the after-treatment, and this can be more thoroughly at-

tended to in a small private hospital than at home.

The time has gone by when the operation needs to be defended. The splendid results already detailed sufficiently demonstrate its "right to be." But there are a few facts and inferences deducible therefrom to which I may be allowed to call your attention. In a recent lecture before the Royal College of Surgeons, Mr. Wells says: "Ovariotomy more certainly saves life from threatened death, restores a woman more certainly to perfect health, renders her more fit for all the requirements of daily life, than almost any other surgical operation. She can scarcely be said to be mutilated; she may menstruate regularly, and bear children of either sex, or twins, without any unusual suffering either during pregnancy or labor. Lord Selborne showed the total gain of life of the three hundred and seventy-three survivors of my first five hundred operations to be ten thousand eight hundred and seventeen years of average healthy life, instead of the one thousand four hundred and ninetytwo years of miserable endurance which they might have passed before death without operation. Of the four hundred patients operated on since the five hundred, three hundred and six are cured, making the total recoveries six hundred and seventy-nine. Multiplying this number by twenty-nine years, the average estimated gain of each patient, the total gain amounts to nineteen thousand six hundred and ninety-one years." At least an equal number of lives have been saved in America by ovariotomists; so that in round numbers forty thousand years of life have been gained by the operation in England and America.

Another interesting point is the fact that menstruation may continue for years after both ovaries have been removed. The late Dr. W. L. Atlee, in his work on Diagnosis of Ovarian Tumors, gives the details of three cases in which there could be no doubt that menstruation con-

tinued after the removal of both ovaries. Mr. Spencer Wells removed both ovaries at once in twenty-five cases. He says: "Many of these double operations have been performed in women past the age of menstruction; but in several cases young women have had both ovaries removed, and in them there has been no return to menstruation as a rule. In three young women there has been a periodical return of something like menstruation, if not true menstruation.1 From circulars returned to me, and from other sources, I am able to say that thirty-five women who were unmarried at the time of the operation have married since; that fourteen have had one child; six, two; three, three; and three, four children. Two have had twins. Of two hundred and fifty-nine women who were married when the operation was performed, twentythree have had one or more children since. I have ascertained from the husband or medical attendant of some of my own patients that sexual desire and gratification have certainly not been less than before operation. In several patients whose menstruation before operation had been painful and irregular, it became quite regular and normal afterwards."

RECENT PROGRESS IN OTOLOGY.

BY J. ORNE GREEN, M. D.

Sewer Gas and Ear Disease.— A number of observations are given by Cassells, which go far to show that sewer gas may exert a very deleterious influence on the ear,—may in fact be the direct exciting cause of inflammations of the tympanum and of catarrhal inflammation of the naso-pharynx. Although these cases cannot be referred to the group of aural affections, described above by Weber-Liel, they are closely allied to them.

The first cases described by Cassells occurred in his own family. He had noticed for some weeks that the air in his nursery was not perfectly pure, without, however, suspecting the drainage. His three children, during this time, appeared unwell, but the only affection that could be found was slight pharyngeal catarrh. One after the other, within a short time, these three children now suffered from acute inflammations of the tympanum. The repeated attacks in all the children led to an inspection of the house, when it was found that there was an escape of sewer gas from the water-closets near the nursery; this being remedied, the health of the family has since been perfect. A short time after this Cassells saw three ladies in one family, all of whom were complaining of occasional dullness of hearing and slight

¹ Italics are mine.

² Concluded from page 23. Edinburgh Medical Journal, April, 1878.

naso-pharyngeal catarrh. The room in which they chiefly spent their time had been noticed to have a disagreeable smell, dependent, as it afterwards was determined, upon a defect in the soil-pipe. All were completely restored, without other treatment, by quitting the infected house for a short time. Another case was that of a lady who suffered from an affection of the ear and general malaise; on leaving home she soon became perfectly well, but all the first symptoms returned on again occupying her own house, to disappear with a second absence. In the mean time defective drainage had been discovered and remedied. Other cases are given of a similar character, which strongly suggest that sewer gas may be an exciting cause of some of the milder forms of inflammation of the mucous membrane in the throat and ear; but this cannot, however, be considered as proven, for it should be remembered that it is an established fact that many cases of acute and subacute catarrhal inflammations are benefited or cured by a change of air alone, be it from the city to the country, from the sea-shore to the inland, or vice versa.

Trophic Disturbances in the Tympanum from Section of the Medulla Oblongata — In connection with the explanation of Weber-Liel that otitis intermittens is due to trophic disturbances from injury of the trifacial nerve, an observation of Gellé¹ is of interest. After section of the medulla oblongata of a dog, he found the tympanic cavity on the same side as that operated upon filled with an opaque fluid containing pus cells, in marked contrast to the tympanum on the opposite side, which was free from secretion and with a thin, pale mucous membrane. He considers that the changes were caused by the injury done to the descending branch of the trifacial nerve in the medulla oblongata by the operation, and were in fact neuro-trophic disturbances in the tympanic mucous membrane.

Bromide of Potassium the Cause of Otitis Externa Circumscripta.—
Grüber 2 calls attention to the observations of Neumann on the eruption produced by bromide of potassium: namely, that it is closely allied to acne simplex; that it appears on the shoulders, chest, face, and forehead in the form of papules and pustules, and is sometimes accompanied by fever; that the eruption generally appears in the hair follicles; and that the secretion consists of pus and smegma. He then narrates two cases which had come under his own observation, in both of which there were a number of furuncles in the meatus; both patients were taking the bromide of potassium, and both showed the characteristic eruption on the forehead. In the first case the furuncles recurred with great obstinacy, until the bromide was given up, when there was no further relapse; the second case was seen but once. Both cases Grüber regarded as

¹ Gazette médicale, No. 1, 1878.

² Allgemeine Wiener med. Zeitung, No. 41, 1878.

otitis externa circumscripta, produced by the internal administration of bromide of potassium.

Softening of the Ossicles. - Hartman 1 narrates an unusual case of extreme decalcification of both stapes which occurred in a soldier who had suffered for many years from chronic purulent inflammation of both tympana. He died from chronic phthisis, and the autopsy revealed the extensive destruction in the tympana so common with chronic otorrheas, and in addition the crura and heads of both stapes were so extremely soft that they could be bent in any direction; the bases of both stapes retained their normal firmness. As a careful examination showed a considerable spot of decalcified bone in the squamous portion of one os temporis, Hartman considers that the condition of the stapes was caused by the marasmus accompanying the phthisis and

not by otorrheal secretion.

Abscess of the Cerebellum rupturing into the Ear. - Gribbon 2 narrates a case of this very rare termination of an abscess of the brain, and it is greatly to be regretted that a little more thorough dissection was not made to show the exact spot through which the discharge took place into the ear. A soldier, twenty-two years old, had had purulent inflammation of the right tympanum for a long time, the drum membrane on this side being entirely destroyed. Eight days before his death he gave up duty, complaining of headache and pain in the ear, which continued without being relieved by any medication. As he was being raised in bed suddenly a stream of pus flowed from his right ear, and he died within one minute. The autopsy showed that the whole cerebellum, except the anterior third of the middle and left lobes, was converted into a fætid abscess, which had ruptured directly over the meatus auditorius. No dissection of the petrous bone to discover the existence of caries, or to find the course of the pus from the brain into the ear, appears to have been made, but from the preceding otorrhœa, and the sudden free discharge of pus evidently through some large communication, it is probable that carious destruction of the bone, either the roof of the tympanum or the inner wall of the mastoid cells, had already taken place before the rupture.

The case in none of its features can be regarded as a primary inflammation of the brain, any more than one or two others which have been reported within a few years, where neglect to examine the ear, both during life and after death, destroys the scientific value of the case. This report of Gribbon adds another to the many already published, showing how slight the symptoms may be when even a large portion of the brain is disorganized. In this case the soldier was on duty till eight days before death, and the only symptoms complained of

¹ Archiv für Ohrenheilkunde, vol. xiii., page 259.

² Lancet, No. 20, 1878.

were headache and muscular weakness; the amount of disintegration of brain substance and the only symptom complained of, which existed for some time before his giving up duty, namely, a sense of weight in the head, would show that the pathological process in the brain must have been going on much longer than these eight days.

PROCEEDINGS OF THE SUFFOLK DISTRICT MEDICAL SOCIETY.

T. M. ROTCH, M. D., SECRETARY.

MAY 25, 1878. Fifty-eight members were present, the president, Dr. Ho-MANS, in the chair. The records of the last meeting were read and accepted.

Medical Library. — The committee on change of rooms reported that the Boston Medical Library Association had purchased rooms wherein the meetings of the different societies could be held; the committee recommended the society to authorize the treasurer of the Suffolk District Society to terminate the lease of the rooms then occupied by the society, and to enter into negotiations for the new rooms, provided that the other societies did likewise.¹

Hernia. — Dr. H. O. MARCY read a paper on the radical cure of hernia by the antiseptic use of the carbolized catgut ligature. Reserved for publica-

tion.

Sun-Spots and Epidemics. — Dr. E. W. Cushing read a paper on sun-spots and epidemics, tracing the relation between the great epidemics which have devastated the world from the time of Homer down to the present century, strange natural phenomena either heralding or accompanying them; showing, also, that the epidemics are now known to depend on or at least coincide with

the changes of solar energy, corresponding with the sun-spot cycle.

Color-Blindness. — DR. B. J. JEFFRIES read a paper on the Relative Frequency of Color-Blindness in Males and Females.² Dr. Jeffries then explained the various recently proposed tests for color-blindness, showing each and discussing its merits, after the methods of Stilling, Donders, Daac, Cohn, Don and Holmgren, the last being the selection and matching of colored worsteds; he considered this test the most practical, the simplest, and surest. The correctness of his extended remarks was exemplified by testing practically a redblind member of the society present, who verified all that was said by his own account of his color-blindness and his attempts to obviate his misfortune, as also by his peculiar selection of the worsted in exact accordance with the speaker's report regarding the color-blind amongst the ten thousand persons he had tested by this method of Professor Holmgren, of the University of Upsala, Sweden.

2 Published in the JOURNAL, July 25, 1878.

Since the above was written all the societies have voted to meet in future at the hall of the Library Association.

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QUARTERLY MEETING OF THE RHODE ISLAND MEDICAL SOCIETY.

The regular quarterly meeting of the Rhode Island Medical Society was held in Providence, December 18, 1878, the president, Dr. E. T. Caswell, in the chair. The committee appointed at the last meeting to make collections for the benefit of the families of physicians at the South who died from yellow fever during the late epidemic reported that they had collected and forwarded to the secretary of the Mississippi Medical Society the sum of one hundred and twenty dollars.

Upon recommendation of the board of censors the following gentlemen were admitted to membership: J. B. Chapin, W. H. Greene, F. H. Rankin, of Providence, C. B. Mathewson, of East Greenwich, and W. S. Smith, of Scituate.

The president announced the recent death of Dr. S. Augustus Arnold, the oldest Fellow of the society, and in a few well-chosen remarks paid a fitting tribute to the character of the deceased. A committee was appointed to draw up a series of suitable resolutions to be placed upon the minutes of the society. This committee subsequently reported as follows:—

"Within a few days before this meeting, on the 12th day of December, the oldest Fellow of this society has been removed by death. Dr. S. Augustus Arnold was admitted as Fellow in 1822, and during the long period of fifty-six years has been an active member, partaking often in our discussions, holding many offices of trust and responsibility, and serving as president in the years 1849 and 1850.

"The announcement that this long association is to exist no more, and that his useful and honorable life has come to an end, cannot be received by us without deep regret. We desire to place on permanent record our appreciation of his fidelity to his convictions, his integrity and consistency of life, his earnest devotion to the profession of medicine, and his important services not only to our society, but to the community in which he lived.

"It is therefore voted that this minute be entered on our records and communicated to his surviving children, with the assurance of our sincere sympathy in this sudden and irreparable loss.

CHARLES W. PARSONS.

ARIEL BALLOU.

JAMES H. ELDREDGE."

Medical Witnesses. — Dr. Turner, of Newport, made some remarks in regard to the compulsory attendance of physicians as witnesses in courts. He thought that some action should be taken to provide a law, if possible, by which courts should have discretion to allow a reasonable compensation, as is done in some other States. In the present state of the law in Rhode Island it frequently works great hardship in compelling long attendance with no adequate pay.

Dr. Garvin, of Lonsdale, in the course of remarks upon the same subject stated that on one occasion, being under summons to attend court at a certain hour, he found himself at that time in the midst of a case of labor, which of course he could not leave. On his arrival at court, half an hour late, he was informed that a writ had been issued for his arrest. But upon explanation of the circumstances he was allowed to escape further penalty upon payment of costs.

Upon motion of Dr. Turner, a committee consisting of Drs. Garvin, Kenyon, and Dedrick, was appointed to inquire what measures could be taken to pro-

cure legislation that would remedy this evil.

Metric System. — The report of the committee upon the adoption of the metric system was read by Dr. J. W. Mitchell, of Providence. Upon recommendation of this committee, a resolution was adopted that on and after January 1, 1880, the metric system should be used by the Fellows of this society in the writing of prescriptions.

Medical Examiners. — Dr. H. W. Williams, of Boston, was introduced, and gave an account of the recently established system of medical examiners in the State of Massachusetts. He described the workings of the new law, and dem-

onstrated fully its superiority over the old coroners' inquests.

Catarrh. — Dr. H. G. Miller, of Providence, made some remarks upon the treatment of naso-pharyngeal catarrh. He deprecated the use of saline and other liquid applications by means of the nasal douche, as liable to produce injury of the middle ear. He recommended that all remedial agents should

be applied in the form of dry powder by insufflation.

Dysmenorrhæa. — Dr. Virgil O. Hardon, of Providence, read a paper upon Mechanical Dysmenorrhæa. He described the symptoms and pathology of this affection, and advocated the treatment by incision of the cervix uteri after the manner of Sims. He cited a number of cases from his own practice which had been successfully treated in this way. This paper was followed by an animated discussion. Most of the participants were of the opinion that in the majority of cases of mechanical dysmenorrhæa an operation is not necessary, but that relief may be obtained by dilatation of the cervix uteri or by the use

of anodynes.

Diphtheria. — Dr. J. O. Whitney, of Pawtucket, read an elaborate essay upon Diphtheria, in which he brought forward some novel ideas in regard to the ætiology and pathology of the disease. He maintained that there is but one pseudo-membranous disease, which has at different times borne a variety of names, such as diphtheria, croup, putrid sore throat, membranous laryngitis, cynanche maligna, etc. It is contagious or infectious in proportion to its visible putridity in individual cases, the contagious principle existing both in the breath of the sick and in the more solid discharges from the affected surfaces. It is primarily a local disease, the constitutional results depending upon absorption of the decomposed membrane. One attack gives no protection against a future attack.

The meeting was then adjourned, the society accepting a cordial invitation from the president to partake of a bountiful repast furnished by him at his house.

THE AMERICAN QUARTERLY MICROSCOPICAL JOURNAL.

THERE seem to be two ways open to those who desire the improvement of the microscope; historical proof of this statement is afforded by the classification of "Continental" and "Anglo-American" instruments which has always obtained. The characteristic of the Continental method has been the secondary position of the manufacturer; he has worked according to the intelligent demands of men who from Kölliker to Ehrenberg knew exactly the kind of instrument that they needed. The characteristic of the Anglo-American method has been the prominent position which the manufacturer himself has occupied in stimulating among the public - learned and otherwise - a taste for technical excellence which but few observers have been able to utilize. Few who wish to be considered patriotic would care to dispute the preëminence of American objectives; few who wish to be considered sane would deny the superlative value of Anglo-American glasses; at the same time we must allow that the greatest development of histology, in fact of all branches of science, has been accomplished by means of the inferior Continental instruments. Our superiority in objectives has been attended principally by a simple joy in possession, or at most by such an employment as that which resulted in the ecstasy of the Rev. Mr. Cook after gazing through the seventy-fifth.

A similar distinction may be made between Continental and Anglo-American microscopical journals: in Germany the anatomical, botanical, and other special journals have absorbed the material that in England and America has gone to form a microscopical journal, leaving, perhaps, a certain amount of microscopical literature for society proceedings; England and America, on the other hand, have witnessed the rise and fall of a number of journals of this class.

When we compare the following words of an editorial of the new quarterly,
—"This leads us to a statement of what, in our opinion, a microscopical journal should be. Recognizing the value of microscopical study in the various branches of natural science, such a journal should aim to publish the results of research carried on with the microscope in every department," — with the only article that we feel specially capable of appreciating, we feel afraid that the zeal of the editor has directed the aim of the journal almost too high for success; that originality and real character will be sacrificed in attempting to publish results of research in every department. We believe that a recent decease in Euglish microscopical journalism was caused by the futility of such an attempt, and that prudence would counsel a more limited endeavor.

We express our opinion, however, with the utmost good will toward our latest and fairest attempt at microscopical journalism; if it fails to select the most scientific of anatomical and physiological papers it will without doubt do much to cultivate among its medical readers a generous interest in other departments of research, and, we hope, increase the amount of popular interest in the observation of nature.

¹ The American Quarterly Microscopical Journal. Volume I. No. 1. October, 1878. Containing the Transactions of the New York Microscopical Society. Edited by ROMYS HITCHOOCK. 150 Nassau Street, New York.

HOLDEN'S OSTEOLOGY.1

THE superlative merits of the plates of this work and the pleasant style in which it is written have atoned for many deficiencies both in accuracy and fullness. We do not intend to imply that the text has been bad, but only that it has not been very good. The present edition is in many respects much better than its predecessors. It has been carefully revised; several additions and one most judicious omission have been made. An admirable plate has been added to illustrate the structure and development of bone, and there are also new wood-cuts for the same purpose. The chapter on this subject, though not exhaustive, is very satisfactory. We do not think it necessary to record the various technical criticisms we could make. The text, though not all it might be, is on the whole good, and can be safely recommended to students. We regret that the author devotes but a few words to the internal architecture of bone, and says nothing at all of it in describing the individual bones. This certainly, in view of many recent researches, is a serious deficiency. We must protest also against having Hutchinson's impossible theory of the action of the intercostals presented without a word of apology, or as much as a hint that its correctness has ever been questioned. The omission which delights us is that of the chapter on transcendental anatomy. Both students and teachers can employ their time better than in endeavoring to free the poor archetype from the mass of error and jargon that covers it.

T. D.

HILTON'S REST AND PAIN.2

This work is one of that class which makes reputations, its author being better known in this country for the valuable series of lectures he has published on this subject than for any other of his professional labors. To those who are not familiar with the book we would explain that this is not a compact little monograph on what might be supposed to be an easily handled subject, but a series of eighteen lectures illustrating the advantage of the applications of dry anatomical facts, too frequently forgotten by the surgeon by the time his experience is mature, to carefully prepared clinical studies. The relation of nerves to diseased organs, the condition of the nervous centres and the joints in surgical disease, the significance of pain as a symptom of disease, and the great value of rest as a fosterer of repair, or as a maintainer of the healthy action of an organ, are some of the points illustrated by a large number of cases and a generous supply of wood-cuts. The appearance of the book in its present form adds to the interest with which it will be received. It is the first of the new monthly series of Wood's Library of Standard Medical Authors, which is to be issued at such moderate prices as to place these

¹ Human Osteology. By LUTHER HOLDEN, F. R. C. S. Fifth Edition, revised by the author, with the assistance of ALLAN DORAN, F. R. C. S. With numerous illustrations. Philadelphia: Lindsay and Blakiston. 1878.

On Rest and Pain. A Course of Lectures on the Influence of Mechanical and Physiological Rest in the Treatment of Accidents and Surgical Diseases, and the Diagno tic Value of Pain. Delivered by John Hilton, F. R. S., F. R. C. S. Edited by W. H. A. JACOBSON, F. R. C. S. Second edition. New York: William Wood & Co. 1879.

books within the reach of those who have hitherto been unable to indulge in many of the more valuable writings of the day on account of their expense. It is part of the general movement to popularize literature of the highest order which should meet with universal encouragement.

JOHN BARNARD SWETT JACKSON.

The death of Dr. Jackson comes upon us as a loss we had little contemplated and for which we were quite unprepared. Age had not left him unchanged, but it had never subdued his clastic and almost youthful nature. A sudden and brief illness, attended with less of suffering than that which we are too often called to witness, ended in a few hours of unconsciousness, followed by a quiet release.

No man has ever died among us who has been more universally loved and respected, or whose loss has been more felt than his will be by the members of the profession to which he belonged. He was less widely known to the community at large than many others, but it would be safe to say that no one ever heard his name mentioned but in tones of kindly regard, or his character referred to except as that of a man without guile, true as truth, pure as purity, honest as Nature herself, whose works he studied. It may sound like extravagant language to claim so much for him, but he was quite exceptional in the singular child-like simplicity and transparency of his character, and in using the expressions here applied to him it is only among those who did not know him that such words need fear questioning comment.

Born in Boston in 1806, he graduated at Harvard University in 1825, and took his medical degree in 1829. In 1847 he was appointed to the Professorship of Pathological Anatomy in the Medical School of the University, which office he held at the time of his death.

The class to which Dr. Jackson belonged in college numbered many distinguished names. At the head of it stands that of Charles Francis Adams, the man in whose firm hand the country felt its dignity and honor safe in the most perilous moments of its long agony. Admiral Charles Henry Davis, who united great scientific acquirements to the distinction he gained in his profession; Judge Ames, of the Supreme Court of the State; the Reverend Drs. Hedge and Lothrop, conspicuous among the clergy; the distinguished astronomer, Sears Cook Walker; John Langdon Sibley, as true-hearted an enthusiast in his Library as Dr. Jackson was in his Museum; Dr. Augustus Addison Gould, beloved as a practitioner, highly esteemed as a man of science, —all these names are in the list of graduates of 1825. Not one of those whose names are mentioned, living or dead, was more faithful in the task to which he set himself than our patient, unwearied Curator, our sincere and devoted teacher.

It was not as a practitioner that Dr. Jackson was chiefly known. He was not in all respects fitted for the every-day work which belongs to that laborious calling. He was perhaps too sensitive, and, if such a word may be ventured, too scrupulous, to work quietly and easily to himself, which is one great condi-

tion of success. A great physician must have something of the great general about him, and more than one great general has left it on record that he could get a good nap on the battle-field in the interval of its decisive moments. The singular delicacy of Dr. Jackson's nature stood in the way of his success in the rough out-door world where men are necessarily jostled together in competition. With his vast knowledge of disease it might have seemed that he would be wanted everywhere in consultation. Perhaps he knew too much; knew the tricks of nature which baffle the most skilful diagnosticians too well to speak with that positiveness which is often decisive, in virtue of its personal emphasis, in cases where doubts are plenty and convictions feeble; where in the words of the great old master "the moment is pressing, experiment dan-

gerous, judgment difficult."

It was not in the routine of medical practice that Dr. Jackson won that great reputation which reaches all over the land, and beyond it, wherever pathological science is cultivated. He studied disease in its effects upon the organs. There was a long series of years during which the ruined or injured vital machinery of our fellow-citizens, the cause of whose death was asked by those interested, was almost certain to pass under his thorough and careful inspection. The results he found in each case he minutely recorded. The history of the disease he took the greatest pains to learn. What Morgagni did for Valsalva he did for the whole medical profession of our city. In this way he accumulated a great mass of original materials, fresh transcripts from nature, which as far as they professed to go would be more likely to gain than lose by comparison with the famous works of an earlier day, the Sepulcretum of Bonetus, the great treatise De Sedibus et Causis Morborum, or the Clinique Médicale of Andral.

"As far as they professed to go." There is no propriety in comparing pathological anatomy as Dr. Jackson studied it with the pathological histology of a later epoch. He was not a microscopist. The telescope of the infinitesimal universe had not perfected its eyesight until long after he had become an adept in studying the larger aspects of diseased structure. What he knew he knew thoroughly, but he never pretended to have the slightest knowledge beyond what his honest naked eyes could teach him. He was not ashamed of their nakedness: in fact it was next to impossible to coax him to look through a microscope, - he would turn away with "I know nothing about it," in a tone that implied he did not want to have anything to do with it. But these same honest eyes of his were very keen ones, and saw things with about as little of chromatic or other aberration as any that have opened to our day-His look penetrated like an exploring needle, and many a tympanitie ligh fancy of careless observers has collapsed under its searching scrutiny.

This is not the place to do more than allude to the record he has left of himself in medical literature. For half a century he has been at work among us, and the inventory of his finished labors, were it made out in full, would astonish many of those who have seen him only when he was busied with some of those smaller tasks in which he was punctilious to an extent that now and then provoked a good-natured smile. He had the true genius of a curator, and was never tired of working at his specimens, to get

them into the best condition and show them off to the best advantage.

To know what he accomplished one must visit the Cabinet of the Society for Medical Improvement. This was the child of his affections. It owed its being to him far more than to any other,—perhaps than to all others. During its earlier years, at least, he was the life and soul of it, and it never lost its hold on his paternal interest. In 1847 he published a Descriptive Catalogue of this museum in a volume of three hundred and fifty pages. It was of this work that a distinguished Philadelphia professor spoke as being the most valuable contribution to pathological anatomy made up to that date in this country.

In this same year, 1847, the late Dr. John Collins Warren presented his large collection of pathological and other specimens to the Medical College. Dr. Jackson had no sooner entered on the duties of his professorship, to which was annexed the curatorship of the Warren Museum, than he began a long series of labors upon the preparations, having reference to their preservation, their proper arrangement and display, and, so far as possible, the obtaining of information as to their history. This was continued most patiently and diligently for more than twenty years, until, in the year 1870, Dr. Jackson published his Descriptive Catalogue of the greatly increased Warren Anatomical Museum in an octavo volume of seven hundred and fifty well-filled pages.

These "Catalogues" are much more than the words might lead one who read the titles on their backs to infer. A very large amount of valuable practical information is contained in the two volumes. All the specimens are classed systematically, and a large proportion of them described in such a way that each of the works may be consulted with profit in a great number of

medical and surgical cases.

Dr. Jackson's unpublished medical records are voluminous, and if they could be published entire would prove a vast storehouse of important knowledge. Many of his observations have the merit of originality, — some of them, it may be, which were truly his own, belonging equally to others. Among them may be mentioned, as having been considered at the time new and independent observations of Dr. Jackson's, the fact that the decidua was not a "false membrane," but a changed condition of a normal tissue; the partial antagonism or incompatibility between tubercle and cancer; the infrequency of tubercle in alcoholic subjects, to which might be added many small anatomical points which he was always ready to illustrate by his specimens. Those who knew Dr. Jackson's truthfulness would feel sure that he would claim nothing as his own discovery which he did not believe to be so, and those who knew his curious accuracy would be just as certain that such eyes as his must have seen many things which all common observers had overlooked.

As a lecturer Dr. Jackson was exact rather than fluent or copious in expression, but his knowledge was so genuine and so thoroughly his own that it commanded the closest attention and the greatest respect. For the last few years he has not lectured, but confined himself to his duties as curator. Never was there a more enthusiastic devotee to that particular kind of work. He was a picture of cheerful content in the midst of the fragmentary specimens of nature's handiwork by which he was wont to be surrounded. No student in the first flush of his boyish enthusiasm was ever more full of excite-

ment, more radiant with delight, than this man whom the record called old, but whom his unquenchable vitality preserved ever youthful and ever happy in illustrating some fact by a new preparation, or in rendering presentable some

dilapidated tenant of his immortalizing receptacles.

In many points he resembled that model of all the finest qualities which belong to the student of science, Dr. Jeffries Wyman. In both the love of knowledge for its own sake was the divine gift which set them apart from the men of mixed motives, who have a conditional liking for truth among many other things. It is truly an inspiration, as much so as that of the poet, which renders students of nature like Wyman and Jackson restless under the stimulus of half knowledge, and keeps them wakeful until they have got at some secret which seems to hide itself from their search. Few, very few of our men of science pass so large a part of their lives in their laboratories. In both there was the same union of modesty of statement with confidence in the accuracy of what they alleged as the result of their own observation. Each knew the other's exactness and trustworthiness. Dr. Jackson often cited the keen observations of Dr. Wyman with the evident feeling that he was referring to a man whose eyes were as sharp as his own, - the highest compliment one observer can pay another. He would not have claimed the discursive range or the inventive ingenuity which so eminently belonged to the Cambridge biologist and comparative anatomist, whose large outlook took a wider field of knowledge for its province. But differing in their special gifts, their noblest qualities were such as belonged equally to both. If such a title were known to the calendar as Saints of Science, both these faithful, sincere, modest, pure-minded students of nature would be numbered among them.

A new generation had grown up since Dr. Jackson had passed the middle term of life. The aspect of his chosen branch of knowledge had greatly changed since he stood forth as its oracle among us. But the whole profession knew what he had done for it; the older members had seen him building up the two museums of which he was the chief architect; the younger knew, in some measure at least, the breadth and depth of his long-continued labors. So when a few years since the proposal was made that he should be invited to sit for his portrait, it met with a response which showed that the profession which he had served so long and well could not wait to bear their testimony to the universal esteem and veneration in which he was held until that term should be reached when praise wastes itself unheard by those upon whom it is lavished. His quiet life will be long remembered in the truly monumental works it has left as his record. But ah, how much else that cannot be forgotten! Many friends remain with us, but there is not one who can fill just that place in our affections which he leaves vacant. Who is there so young in heart while so far along in years? What friend is there whose thorough goodness and truthfulness are rendered so interesting by the individual traits which made him unlike all others? We may thank God that many are left to love and to honor, but one smile, one voice, one companionship, one character, with all its ennobling essentials and all its endearing accidents, we count henceforth only as a memory, and sadness is in all our hearts. O. W. H.

A DEPARTMENT OF PUBLIC HEALTH.

A BILL to establish a department of public health was lately brought before the senate at Washington by Mr. Lamar, of Mississippi, read twice, and referred to the select committee to investigate and report the best means of preventing the introduction and spread of epidemic diseases. We imagine that nothing will be done hastily or without due consideration in so very important a matter; but its very importance, and the not unusual presence in washington of men who, even in regard to the public health, have their minds set rather upon personal profit than upon the public weal, make it desirable that any step toward establishing a department or board of health should be subjected to careful scrutiny and criticism.

The present bill proposes "that there shall be established at the seat of government of the United States a department of health, the general design and duties of which shall be to acquire and diffuse among the people of the United States useful information on subjects connected with the public health; to direct the establishment and management of efficient savitary and quarantine systems and regulations; to supervise the marine hospital service; and to organize and direct a corps of sanitary engineers competent to superintend all public works so far as their construction may affect the public health." This preamble is the first of ten sections, in which the department immediately disappears. We are promptly introduced in section two to a director-general of health at a salary of seven thousand five hundred dollars per annum, who figures extensively through the remaining sections, giving the department an opportunity to come to the surface a moment for air at the close of the bill. The director-general's duties and powers are, as might be supposed, sufficiently multifarious and extensive; if he performed the one thoroughly and wielded the others sagaciously he would richly earn his salary, nor would he escape a good deal of active malevolence, and we are afraid but little time would be left him to cherish the union of his official head with its departmental trunk. A man of unquestioned fitness and unusual executive ability might not find such an outlay of time necessary; any other certainly would. In section three the director-general of health swallows up the supervising surgeon-general of the marine hospital service, with his duties and powers, records, papers, and other matters pertaining to that service. It would be of the first importance that there should be the most cordial cooperation between the department of public health and the marine hospital service, but we should suppose that this might be secured without merging the one into the other. The excellent work of preceding years shows that there is ample room for the exercise of first-rate abilities in the marine hospital service alone. Section four contains the pith of the bill, for in it our director general assumes the duty to make and enforce all quarantine and other regulations for preventing the introduction and spread of epidemic diseases. The manner of discharging this very grave duty would of necessity depend much upon the individual views of the director-general with reference to the value of quarantine. Section five imposes upon the already hard-worked officer the duty of preparing suitable tables for the taking of each census, these tables to embody such data as will furnish a basis for securing a complete system of registration of vital statistics for the United States. Section six requests the director-general to procure information relating to climatic, meteorological, geological, and other conditions affecting the public health, and to furnish the same when wanted; in section seven he is empowered to employ and pay specialists; and section eight allows this omnipresent director-general to make his annual general report accompanied by papers and special reports on particular subjects, to hand in his accurate accounts, and to take a little well-earned repose; while we turn in section nine to our well-nigh forgotten department, with its additional officers which may be required, — for instance, a chief clerk, chemist, engineers, experts, and so forth. We shall doubtless have to revert to this whole question again, as it is one of such vital consequence to the country at large and to every individual.

MEDICAL NOTES.

— The Gazette des Hôpitaux, of October 26, 1878, says that Mr. A. Preterre, the surgeon dent st of Paris, known to medical practitioners by his works of dental prothèse and his apparatuses for palatine restorations and other buccal operations, obtained at the Universal Exhibition of Paris the sole gold medal awarded to dentists.

-The death of eighty-one physicians from yellow fever is reported by a Southern journal.

— Dr. Klein has shown that the infectious pneumo-gastritis or typhoid fever of the pig, like splenic fever, was due to a bacillus. Having succeeded in cultivating this bacillus so as to raise crops free from all other organisms, Dr. Klein inoculated healthy pigs with a fluid containing the bacilli, and in due time the disease arose and followed its ordinary course. This experiment distinctly proved that two diseases of the higher animals, namely, "splenic fever" and "infectious pneumo-gastritis," are generated by a contagium vivum. Messrs. Downes and Blunt have commenced an inquiry into the influence of light upon bacteria and other fungi. The investigations seemed to show that strong solar light checked and even arrested the development of these organisms.

— In the Richmond and Louisville Medical Journal for November is related the story, disgraceful in all its bearings, of the origin of the use of belladonna as a prophylactic against scarlet fever, in the hands of two disciples of Hahnemann, whose method of introduction revealed cupidity, quackishness, and inhumanity.

— The Deutsche med. Wochenschrift relates a case in which Dandridge and Connor examined the pelvis of a man by Simon's method, with a view to obtain accurate information concerning a psoas abscess. They assert that absolutely no force was used, and that they did not go higher than the bifurcation of the aorta. Immediately after the exploration, however, symptoms of peritonitis set in, and the patient died. The autopsy revealed a rupture of the peritonæum, five inches above the anus. The mucous membrane was also torn above the sphincter. This is another case proving that Simon's method—introduction of the whole hand into the rectum—is not entirely harmless.

— Mr. Spencer Wells has been elected honorary member of the Dresden Gesellschaft für Natur-und-Heilkunde "in recognition of his eminent merits in medical science." — Dr. Fordyce Barker has resigned his position as one of the surgeons of the Woman's Hospital of New York. — Professor Grüber, of Vienna, has written a scathing review of Professor Politzer's book on diseases of the ear. See the Allgemeine Zeitung, No. 46.

NEW YORK.

— At the recent adjourned annual meeting of the County Medical Society, the committee on hygiene presented through its chairman, Dr. E. G. Janeway, of the board of health, a report which contained much information of interest. From it we learn that if a comparison of different years is instituted on the basis of mortality proportioned to population, the citizens of New York enjoyed better health during 1877 than during any previous year since careful mortuary records have been kept, and that when the reports for 1878 have been completed this year will be found to have proved almost as favorable as its predecessor.

Only two deaths have occurred from small-pox in 1878, and only two individuals have contracted the disease within the city limits during the year. One of these was a barber who shaved a man suffering from the disease who had just arrived in the city; and the other was a man who worked along the docks, and was thus exposed to it. At no period since 1822 has there been as little variola in New York, and the mortality from the disease has been less than thirty in the year only six times since that date. Vaccination is constantly performed by a special corps employed by the board of health for the purpose. There has been some increase over the mortality from croup and diphtheria for 1877, but a marked diminution as contrasted with the other years since 1872. The mortality from typhoid and typhus fever is decreasing, and is less (notwithstanding the increase of population from 515,000, in 1850, to 1,083,000, in 1878) than it was in 1848.

The report goes on to say, "We think that no one can have any hesitation in stating that there has been a marked improvement in the public health. Nor should this be wondered at when we consider that much improvement has been made in the sauitary condition of dwelling-houses, as well as in other matters: soil-pipes having been ventilated, traps placed beneath sinks, etc., privies ventilated so as to remove foul odors from tenement-house yards, sewers reconstructed, etc."

In regard to the summer mortality in 1878, it says: "There were five hundred and twenty less deaths than in 1877, and we feel justified in claiming that comparatively fewer deaths happened in the summer quarter of this year than in any of its immediate predecessors for twenty years, over which our study on this subject has extended.

DEATHS PROM DIARRHIEAL DISEASES.

| | DE. | | | | | | | |
|----------------|------|------|------|------|------|------|------|------|
| Third quarter. | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 |
| | 2324 | 3520 | 3030 | 2784 | 2999 | 3064 | 2657 | 2119 |

[&]quot;We know of no other table which has been presented, except, perhaps, that

of variola, which offers so much of interest for the humanitarian and sanitarian. Notwithstanding a marked increase of population (more than one hundred thousand) from 1871 to 1878, we behold in this latter year a less number of deaths from diarrhœal disorders than in 1871 by two hundred and five, and, as contrasted with other years, still more noticeable. . . This improvement we believe to be due to the efforts made in the summer season by the corps of fifty physicians employed by the board of health to visit tenement houses in search of cases of infantile diarrhœa not under treatment, and to give advice and treatment to such as had no physician, as well as to the efforts in a similar direction (though not on so large a scale) conducted by the Children's Aid Society, and to the excursions for sick children offered by the St. John's Guild, and the visits of the sick children to sanitaria. There can be no doubt to a careful investigator of the value of these remedies, as the study extends not over one year, but over six years."

—This year the ladies of the Flower Charity undertook to decorate all the principal hospitals, not only of the city, but also of Blackwell's Island, for Christmas, and as their friends were very liberal with their contributions of evergreens, autumn leaves, grasses, berries, and ferns the result was a great success.

— December 29th was "Hospital Sunday" in all the Protestant Episcopal churches, when the collections made were devoted to the support of either St. Luke's Hospital or St. Mary's Free Hospital for Children, and in some instances the amount raised was divided equally between the two institutions. In the annual report of St. Luke's, just published, the superintendent mentions, as an instance of the gratitude of patients for the services rendered them, that during the past year he received fifty-nine dollars, which was left by a poor seamstress in Ireland as a thank-offering for the care she received as a patient eighteen years ago.

LETTER FROM ST. LOUIS.

The Regulation of Prostitution. - A New Journal.

MR. EDITOR, — I had intended telling you in this letter something of St. Louis in its purely medical relations, but as there are certain matters of more extended interest under discussion here at present, I shall reserve that information for another occasion. The city fathers have of late been considering the various arguments for and against the advisability of reënacting what is known as the "social evil ordinance." This ordinance, which was in force some years back, and then was repealed, gave the board of health and police department authority for the registration of all prostitutes, provided for their periodical examination by official physicians, and gave the power to isolate in the Female Hospital those found to be diseased. The women were compelled to pay a weekly stipend, which was expended solely for their benefit, and went to the support of their hospital. They were entitled to care in this institution, not only when suffering from venereal disease, but also when sick from other causes.\(^1\)

¹ This hospital was subsequently converted into a woman's general hospital.

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time, the point was raised, especially by the clergy, that this was nothing more than a licensing of prostitution, and therefore an infamous compact with sin and Satan. This class of moralists was reinforced by others, who claimed that the physical explorations were a degradation to the sex generally, and insisted that these examinations should be extended to male offenders against morality as well. These various arguments the legislature conceived to be of sufficient cogency to cause the downfall of the system, and in its stead a mongrel sort of repressive bill was passed. Under this new act the brothels of the city have been constantly raided by the police, the women taken before the justices and fined, or, in lieu of payment, sent to the work-house for a term of weeks. The money thus mulcted from them has been expended without any qualms of conscience upon various lines of public improvements. In the mean time we have had the profound moral satisfaction of having dissolved our iniquitous copartnership with Satan, the sex has not been deprived of any of its inherent privileges, and venereal diseases have been allowed free propagation, affecting the just and unjust alike, without let or hindrance from the law, excepting through the administration of the inefficient and unphilosophical repressive measures mentioned above. Night-walking abounds, and the honest wayfarer may be importuned by Scylla or Charybdis, from door or window, in any part of the city where money may establish a bagnio. I would not give the impression that St. Louis is morally more lax than any other large city, for it is not; but when we compare the old law in its sanitary and police aspects with the present state of things, we seem to be a perfect Sodom or Gomorrah. As remarked before, the law for regulating the evil has been and is now opposed on purely moral grounds, the sanitary side of the question being completely ignored; indeed, one prominent moralist went so far as to say that if we were able by any legislative enactment to succeed in exterminating venereal disease, we should be committing the sin of "deposing God's judiciary and police, established by him to check this great evil." There is no thought of mercy to the fallen, or of efforts at restoration to a better life in such utterances. Lecky and Sanger have well shown the futility and danger of attempts at harsh measures of repression, even by "God's judiciary and police." I have neither time nor space to enter into a further consideration of this vital question, except to say that at the recent investigation of this subject before a select committee of the municipal assembly, the reënactment of the same or a similar ordinance was the unanimous desire of those most competent to form an intelligent and conscientious opinion. The police authorities favored the old law, because through its operations vice of this sort could be kept in due bounds. The necessity for registration drove many away, and the fear of its publicity prevented many others from seeking the career at all, and through the facility, obtained in this way only, of reaching this class, scores of young girls were rescued from a life of shame and restored to virtue. The medical profession were emphatic in their approval of the preëxisting régime because they had actual demonstration of the assertion that thereby venereal disease was notably decreased. A rigid morality would rightly care little for the consequences to the male offenders against chastity, but as this evil must and will persist, sanitary science looks to the protection of the innocent indirectly involved through its existence.

The medical profession here has been deeply interested by the announcement of a new journal shortly to be issued under the auspices of the Missouri Medical Journal Association, with head-quarters at St. Louis. Long since dissatisfied with our local medical press, the representative men of the city and State have associated themselves together, with an abundant capital, for the purpose of establishing a monthly periodical, which, it is hoped, will be second to none in the country. The enterprise is not a personal one in any sense; no party ends are to be served, and all profits accruing from the publication will go to the further endowment of the magazine. It is but just to say that the general method of your own esteemed journal has been kept in view by the management, as an eminently safe and successful model for its own guidance. It is difficult to convey to you the enthusiasm and earnest work that this project has evoked, and I think I may say without exaggeration that a new era in Western scientific medicine will dawn with the birth of the Courier.

H. A. W.

St. Louis, December 24, 1878.

NOEL.

A CHRISTMAS ANACREONTIC.

Bring me turtle here in bowls!
Bring me turbot, bring me soles!
Turkey too, and dainty chine,
Balls of sausage-meat combine;
Tipsy-cake and Roman punch;
Of plum-pudding a good hunch,
With mince-pies, both brandy-sauced,
Bring — the list I can't exhaust —
Bring them all! and, when you do,
Bring the nearest doctor too!

From an English journal.

THE METRIC SYSTEM IN MEDICINE.

| OLD STYLE. | | | | | | METRIC. Gms. | | | | |
|----------------------|--|--|--|--|--|-----------------|--|--|-----|----|
| mi. or gr. i. equals | | | | | | | | | 1.7 | 06 |
| f3i. or 3i. equals | | | | | | | | | 4 | |
| f 3i. or 3i. equals | | | | | | | | | 32 | |

The decimal line instead of points makes errors impossible.

As .06 (Drug) is less than a grain, while 4. and 32. (Vehicle) are more than the drachm and ounce, there is no danger of giving too large doses of strong drugs.

C. C. used for Gms. causes an error of 5 per cent. [excess]. A teaspoon is 5 Gms.; a tablespoon, 20 Gms.

BOOKS AND PAMPHLETS RECEIVED. — Modern Medical Therapeutics. By George H. Napheys, A. M., M. D., etc. Sixth Edition, enlarged and revised. Philadelphia: D. G. Brinton. 1879.

Conspectus of Organic Materia Medica and Pharmacal Botany. By L. E. Sayre, Ph. G. Philadelphia: D. G. Brinton. 1879.

Differential Diagnosis: A Manual of the Comparative Semeiology of the more Important Diseases. By F. de Havilland Hall, M. D., Assistant Physician to the Westminster Hospital, London. American Edition, with extensive Additions. Philadelphia: D. G. Brinton. 1879.